

REMARKS/ARGUMENTS

The Official Action has been carefully considered and the Examiner's comments are duly noted. Reconsideration of this Application, in view of the amendments to the Claims and Arguments submitted is respectfully solicited.

Please note for the sake of the record that claims 1 to 6 have been cancelled. Claims 7 and 10 have been amended. New Claims 14 to 23 have been added. The active pending claims in this Application are Claims 7 to 23.

With respect to the Claims rejection under 35 USC § 112, Claim 10 has been amended so as to set forth the pounds per inch for the strength units. Claim 4 has been cancelled. This takes care of paragraphs 1 and 2, and the rejection under 35 USC § 112.

New Claim 21 has been added, and this Claim 21 further defines the apparatus for jetting clean water derived from the water in the swimming pool back into the swimming pool. Clearly, none of the references of record taken either singly or combined in any valid combination accomplish this particular purpose.

New Claim 22 has been added to define the framework 6, 8 specifically in its relationship to the circumferential strip 12 and elongated clamps which help to hold the stretchable non-woven material in place during use. New Claim 23 was added to define the filter bag and sleeve more specifically and the effect of its holding and retention properties with respect to the recessed circumference.

Reference is now made to paragraphs 3 and 4 and the rejection under 35 USC § 102 in which claims 1 and 6 were rejected as being anticipated by Okuniewski et al., U.S. Patent No. 3,762,565, and while these claims were cancelled and replaced with new Claims 14 to 20, Applicant respectfully disagrees with the Examiner because Okuniewski et al. does not specifically and positively teach nor direct one to non-woven material.

The Examiner specifically refers to column 4 lines 1 to 3 of Okuniewski et al. In this respect, the Examiner's attention is specifically directed to column 4, line 1, in which the filter bag 60 is defined as being of woven plastic screening even though later on in the

next line a porous non-woven material is mentioned, as well as any other suitable material. This clearly indicates that either Okuniewski et al. has no clear understanding of the material to use in the present invention or a clear teaching of the use of specifically woven material because as far as Okuniewski et al. is concerned any type of material would be useful, and perhaps even paper. Any type of material is not a teaching of how to practice the invention. Applicant teaches a specific type of material, not just any type of material. Therefore, it is not appropriate to accept the Examiner's specific argument regarding what Okuniewski et al. teaches.

Basically, the Okuniewski et al. device is for a totally different purpose. The purpose of Okuniewski et al. is to prevent corrosion of pipes, not to provide clean water or, in effect, not to re-circulate or jet water back into a swimming pool. The Okuniewski et al. device is used with washing machines from which the water is to be dispensed and from which certain debris is to be prevented from clogging and deteriorating the pipes. It should be noted that a washing machine is not a pool cleaning apparatus, and, therefore, it should be considered non-analogous art. All statements and limitations have to be given full weight and the Examiner cannot pick and choose. The purposes are clearly different and even though the purposes are clearly different, one would not use Okuniewski et al. because there is no clear disclosure of what filter would be suitable for the purpose. The filter selected by Okuniewski et al. as taught by this Patent is a haphazard selection of any suitable filter material. There is no teaching that this can be used with a pool filtering apparatus.

Turning now more specifically to paragraphs 5 to 10 and the rejection under 35 USC § 103 on the basis of obviousness, Claims 1, 5-7, and 11 to 13 were rejected as unpatentable over Dietrich, U.S. Patent No. 5,768,723 in view of Cox et al., U.S. Patent No. 6,419,839 B1.

With respect to the rejection of Claims 2 and 8, in paragraph 8, and the Examiner's comments regarding experimentation, experimentation sometimes requires a sophisticated background in the area of one's work. Clearly, considering Dietrich, which

is a swimming pool vacuum or a cleaning device and a one-way water flout and would not involve the re-circulation or the jetting back of the water into the pool. Dietrich is a cleaning device whereas Applicant's device is to be considered both a cleaning and a re-circulating device for the water. Therefore, it is respectfully submitted that Dietrich can be considered to be non-analogous art because there is no teaching nor suggestion of the recirculation and jetting of water. It is respectfully submitted that it is not analogous art from the view point of the narrow differences between Applicant's subject matter and Dietrich subject matter while they both are broadly related to a pool cleaning device, clearly they are both directed in different inventions and go in different directions.

Further, with respect to In re Aller 105 USPQ 233, 235 and the Examiner's comments that it is not inventive to discover the optimum or workable ranges by routine experimentation when the general conditions are disclosed in the prior art. It should be noted that In re Aller was a chemical case whereas this is a mechanical device. Further, the case hinged on a lack of a showing of any increased yield and the prior art was quite analogous and no commercial success was shown for whatever it may have been worth. It was held within the skill of a chemical engineer. In the present Application, the purpose is to take dirty water and clean it and jetted the cleaned water back into the pool and none of the prior art is even remotely concerned with this feature; therefore, Applicant's contribution was not experimentation on a prior art construction to find the optimum condition, but to provide the best mode of operation of his device for its primary intended purpose.

The Cox et al., U.S. Patent 6,419,839 is also a non-analogous disclosure and Dietrich and Cox et al. are also both directed to different subdivisions of what takes place for pool cleaning. The Cox et al. device is mainly concerned with the constant recirculation of water into a pool so as to clean the water and not to really clean the pool. Whereas, the Dietrich, U.S. Patent 5,768,734, device is concerned with a vacuum for the water in the pool and a vacuum of the contents of the pool for removal thereof. Clearly, they are different directions and different subject matter. One looking to construct a pool where the water is constantly re-circulated would look to Cox et al. One looking to clean

a pool to remove debris from the pool would look to Dietrich, but one looking to clean the pool and to clean the water in which the pool does not have a water recirculation device would not look to either Cox et al. or Dietrich.

In order to form a good suction action, the filter element must be structurally adapted to allow, on the one hand, free passage of water between the water-entering opening at the bottom of the robot and, on the other hand, the exit opening located at the top of the robot. Therefore, while the Examiner may be right in his argument in paragraphs 9 and 10 that one could perform experiments to determine optimum filter characteristics, the same does not specifically apply to the instant case, since one must also be skilled in the art of swimming pool robots of a specific type, in order to determine optimum parameters, including suction power required for specific performance, sizes of openings, etc. of a robot traveling at the bottom of a swimming pool. This is already a different ball game. In any case, these very specific requirements were not at all considered by the Inventors of the references cited, as will be explained.

To perform useful experiments, there must first be an appreciation of the problem. After one appreciates the problem, one skilled in a particular technology is then better able to find the solution. Experimentation without an appreciation of the solution is merely haphazard experimentation. Therefore, In re Aller 105 USPQ 223 does not apply.

It is important to note that the Examiner has given no weight to the distinction between woven and non-woven material, which for a true person skilled in the art is not just another substitution, but makes a fundamental difference in the context of filters, while for others this seems to be trivial. It is for this reason that Applicant submits that the Examiner does not give the invention the understanding it should have.

Now reverting to paragraph 6 of the Official Action and concerning the Examiner's objection in paragraph 6, the Examiner combines the teachings of two references to negate patentability of the present invention.

At the outset, it should be noted that the "antimicrobial non-woven filter media" of Cox et al., has nothing to do with the subject filter. The Cox et al. filter is, in fact, a

stiff cartridge (col. 4, lines 22 to 53) and as claimed in claim 6, col. 12, lines 34 and 35, “an antimicrobial non-woven filter media, comprising an antimicrobial fiber, a second fiber and a binder”.

It is difficult to understand how the Examiner can logically combine the Cox et al. filter with the Dietrich filter, which is described as a “catch bag” filter 80. There is no motivation in Dietrich to replace the “catch bag” filter with the stiff cartridge filter of Cox et al. Moreover, how does the Examiner propose to attach the cartridge type Cox et al. to the structure designed to hold the bag-type filter of Dietrich. Thus, the Examiner’s argument on page 4 of the Official Action concerning claim 7, is unfounded.

The experiments that have been performed to reach these features are not routing experiments, as the field of swimming pool robot cleaners require unique expertise.

In the newly proposed claim 14, the scope of protection has been limited to the specific structure disclosed in the specification.

Clearly, Okuniewski et al. and Dietrich have no concept of the purpose of the present invention, and they have no appreciation of the importance of the non-woven material. Further, they do not have any teaching of reusing the water. Basically, both of the devices are either to remove dirt or prevent clogging of a pipe. Both devices are for one-way water flow and no re-circulation.

Turning now to paragraphs 3 and 4 and the rejection under 35 U.S.C. § 102, claims 1 to 6 no longer appear in the Application and, as will be explained further in connection with a discussion of the various Patents, Claim 1 includes a non-woven filter and, clearly, Okuniewski et al. U.S. Patent No. 3,762,565, did not disclose this specific feature in connection with the subject matter of the invention.

Turning now to paragraphs 5 to 10 and the rejection under 35 U.S.C. § 103, Applicants respectfully submit that there is clearly no motivation in the combination of the three references as indicated by the Examiner, and specifically, it is also submitted that the claims as now presented are patentable over Dietrich, U.S. Patent No. 5,768,734 and Cox, et al., U.S. Patent No. 6,419,839 B1.

At this juncture, it is perhaps best to back up and indicate what the present invention is concerned with.

The present invention is directed to a swimming pool cleaning apparatus, namely a dynamic robot automatically traveling inside a swimming pool. The robot includes a pump sucking in water from the bottom thereof. The water is propelled inside the housing of the robot to its top portion and is allowed to freely enter the disposable filtering bag disposed therein. The clean filtered water is then jetted out back into the pool.

Early and favorable reconsideration, together with the allowance of the Claims, is respectfully solicited.

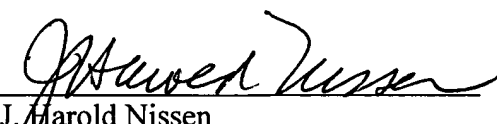
If there are any points outstanding, Applicant's attorney would appreciate a courtesy telephone call in order to do what is necessary to place this Application into condition for allowance.

Please use this as your authorization to obtain a one-month term extension and our check in the amount of \$60.00 is enclosed. If any additional fees are necessary, please charge the same to our Deposit Account 50-3108.

Respectfully submitted,

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